

ABSTRACT OF THE DISCLOSURE

A process of manufacturing a semiconductor device includes the steps of forming a stacked structure of a first III-V compound semiconductor layer containing In and having a composition different from InP and a second III-V compound semiconductor layer containing In. The second III-V compound semiconductor layer is formed over the first III-V compound semiconductor layer and growing an InP layer at regions adjacent the stacked structure to form a stepped structure of InP. The process further includes the step of wet-etching the stepped structure and the second III-V compound semiconductor layer using an etchant containing hydrochloric acid and acetic acid to remove at least the second III-V compound semiconductor layer.